

AMENDMENTS TO THE CLAIMS

1-20. (Cancelled)

21. (Currently Amended) An automatic culture apparatus for culturing cells or a tissue comprising:

a) a plural number of closed ~~with a biological origin in a culture container which is placed in a box type culture apparatus having a closed and aseptic inner space~~ spaces divided by a separator equipped with a practicable door for transferring the culture container, into a plural number of spaces in which the spaces are mutually closable, characterized in that a plural number of divided spaces,

b) a gas incubator provided with a practicable window,

c) a unit for supplying and discharging a liquid culture medium, and a unit for discharging the same,

d) a unit for monitoring the culture conditions, and

e) a transferring unit for continuously or intermittently transferring the culture container toward these units, and are provided in the box of the culture apparatus, and

f) a unit for controlling at least one of the above-described units ~~by is equipped with an instruction controlling unit by which the culture apparatus is controlled under an instruction in the form of an electrical signal depending on a data signal generated by the culture condition-monitoring unit so as to prevent cross-contamination.~~

22. (Previously Presented) The automatic culture apparatus according to Claim 21, wherein the apparatus has a setting unit for introducing a sterile gas into all portions or partial portions in the box of the culture apparatus.

23. (Previously Presented) The automatic culture apparatus according to Claim 22, wherein the sterile gas is an ozone gas.

24. (Currently Amended) The automatic culture apparatus according to Claim 21, wherein the apparatus has a pressure controller an environmental condition setting unit for allowing all portions or partial portions in the box of the culture apparatus to have a positive pressure higher than that of the outer space.

25. (Cancelled)

26. (Previously Presented) The automatic culture apparatus according to Claim 21, wherein a unit for washing cells or a tissue is provided and transferring of the culture container to this washing unit and movement thereof are controlled by the instruction controlling unit.

27. (Previously Presented) The automatic culture apparatus according to Claim 21, wherein a unit for adding a chemical is provided and transferring of the culture container to this chemical adding unit and movement thereof are controlled by the instruction controlling unit.

28. (Previously Presented) The automatic culture apparatus according to Claim 21, wherein a culture substance in the culture container is transferred into and out of the culture container while maintaining a blocking property against the outside space of the culture container.

29. (Currently Amended) The automatic culture apparatus according to Claim 21, wherein a unit for peeling or recovering a culture substance from the culture container is provided in the box of the culture apparatus and transferring of the culture container to this apparatus is made possible by the transferring unit. the apparatus has a vibration unit or a rotation unit for peeling a culture substance from the culture container.

30. (Cancelled)

31. (Currently Amended) The automatic culture apparatus according to Claim 21, wherein the apparatus has a pressing unit for applying physical pressure to culture by contact, a press unit for changing the culture environmental conditions is provided in the box of the culture apparatus and transferring of the culture container to this apparatus is made possible by the transferring unit.

32. (Currently Amended) The automatic culture apparatus according to Claim 31, wherein the press unit is operated by removal and attachment of a magnet or by mechanical pressingmagnetic force or mechanical force.

33. (Previously Presented) The automatic culture apparatus according to Claim 21, wherein the container filled with a liquid culture medium, washing liquid or chemical is not re-used.

34. (Currently Amended) The automatic culture apparatus according to Claim 21, wherein supplying of a liquid culture medium, washing liquid or chemical to the culture container is conductive conducted via a sterilized syringe.

35. (Currently Amended) The automatic culture apparatus according to Claim 21, wherein supplying of a liquid culture medium, washing liquid or chemical to the culture container is conductive conducted via a sterilized tube connected to the container for a liquid culture medium, washing liquid or chemical.

36. (Currently Amended) An The automatic culture apparatus according to Claim 21, wherein the apparatus is equipped with a noninvasive measurement apparatus in which the amount and/or quality of cells or a tissue with a biological origin is analyzed and measured in static adhesion culture using a culture container for culturing cells or a tissue with a biological origin.

37. (Currently Amended) The automatic culture apparatus according to Claim 21, wherein the culture container equipped with a noninvasive measurement apparatus according to Claim 36, wherein the culture container is equipped with electrodes for measuring electric capacity, and a culture substance is placed between two or more electrodes for measuring electric capacity and the electric capacity of the culture substance is measured.

38. (Currently Amended) The automatic culture apparatus according to Claim 21, wherein the apparatus is equipped with a noninvasive measurement apparatus according to Claim 36, wherein a displacement meter provided with an XY scanning unit is placed at an upper position of the culture container, and said displacement meter has a function of analyzing a cell or cells or a tissue with a biological origin is analyzed and measured based on measurement of the thickness of a cell by the displacement meter.

39. (Currently Amended) The automatic culture apparatus according to Claim 21, wherein the apparatus is equipped with a noninvasive measurement apparatus according to Claim 36, wherein a fluorometry unit provided with an XY scanning unit is placed at an upper position of the culture container, and cells or a tissue with a biological origin is analyzed and measured based on fluorometry.